

REMARKS/ARGUMENTS

After the foregoing amendment, claims 1-16 are currently pending in this application. Claims 1 and 9 have been amended to clarify the nature of events and algorithms related to the invention. New claims 15 and 16 have been added to more distinctly claim subject matter which the Applicants regard as the invention. The new claims are supported in the Applicants' filed specification in paragraph 0057, 0059, 0070, 0087, and 0140. Applicants submit that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §103

Claims 1, 2, 7, 9 and 14 stand rejected under 35 USC §103(a) as being unpatentable over Mortensen et al., U.S. Patent Application Publication No. 2003/0096608 (hereinafter "Mortensen") in view of Vucetic et al., 1996 IEEE International Conference on Communications (ICC), Vol. 3, June 1996, pp. 1270-1274 (hereinafter "Vucetic").

The present application is related to reducing or eliminating inefficiencies that may arise when one triggering event at a time is addressed, each with a single algorithm. Inefficiencies in prior inventions are described in the present application in paragraphs 0010 through 0022. The present invention as defined in claims 1-16

is patentably distinct over the cited art at least because multiple events are gathered and stored at the same time.

The Applicants respectfully submit that amended claim 1 is patentable over the cited art for the following reasons. Claim 1 recites the following steps which are not contained in Mortensen:

gathering a plurality of events and storing the events together;

selecting a plurality of RRM algorithms to resolve the events, wherein each of the RRM algorithms in the plurality of algorithms is selected based on the plurality of gathered events;

invoking the selected RRM algorithms, wherein input to each algorithm comprises at least one of the events and each of the events is an input for at least one of the algorithms;

executing the subset of determined RRM algorithms on the radio link;

(Emphasis added).

Mortensen does not disclose or suggest "gathering a plurality of events and storing the events together." Mortensen discloses one response to one event, namely changing an interleaving time length in response to a "congestion situation" which is not defined. (paragraph 0030). This single response is always a change in a parameter (interleaving time length), not in an algorithm. In the Office Action, Page 2, the Examiner equates the "variety of scenarios" in Mortensen's paragraph 0029 with "plurality of events" in present claim 1. The Applicants respectfully disagree. In describing a "plurality of scenarios" in paragraph 0029, Mortensen is referring to

separate scenarios occurring at separate, distinct times. This is indicated by the specific example presented: "congestion [a singular noun] occurring during an ongoing communication session ... ". This is followed by (paragraph 0030): "... the congestion situation [singular] is detected" and "In response to the detection of the congestion situation [singular] the RNC 2 selects an increased interleaving length . . . " (Emphasis added.) The term "congestion situation" is never described in any finer detail. Thus, there is nothing in Mortensen corresponding to "a plurality of events" and therefore, logically, there is nothing corresponding to or suggesting the feature "gathering a plurality of events and storing the events together" of claim 1.

The invention of Mortensen, because it is restricted to a single response to a single event and does not have multiple events stored together, lacks the advantages of the Applicants' invention as disclosed in claim 1 and described above. See the examples shown in the Applicants' Figures 9 and 10, and the descriptions in the Applicants' specification, paragraphs 0082 – 0098.

Claim 1 is also distinguished over Mortensen for the following reasons. Claim 1 recites the following steps:

selecting a plurality of RRM algorithms . . . based on the plurality of gathered events;

invoking the selected RRM algorithms, wherein input to each algorithm comprises at least one of the events and each of the events is an input for at least one of the algorithms;

determining a subset of the selected RRM algorithms, comprising at least two of said algorithms, . . . based on results obtained in the analyzing step;

executing the subset of determined RRM algorithms on the radio link;

(Emphasis added.) These four steps are separate and distinct from one another and each step acts on output from another step. The invoking step provides information used to choose the subset of algorithms which are executed in the executing step. See, e.g., the present specification at paragraph 0057. By contrast, in the invention of Mortensen, there is nothing equivalent to the invoking step; the invention of Mortensen receives a vaguely defined "congestion situation" and responds to it by changing an interleaving length. There is no trial of different algorithm combinations corresponding to the invoking step of claim 1. See Mortensen, paragraphs 0030 and 0032. The invention of Mortensen is therefore incapable of providing the above discussed advantages of the present invention as recited in claim 1.

Vucetic does not remedy these deficiencies. First, there is no teaching in Vucetic corresponding to "gathering a plurality of events and storing the events together." Section 7.2 of Vucetic refers only to "given traffic and interference conditions". Therefore, the invention of Vucetic is incapable of realizing the advantages of "storing the events together" as in claim 1.

Furthermore, there is nothing in Vucetic corresponding to "determining a subset of the selected RRM algorithms, comprising at least two of said algorithms . . . ". Vucetic section 7.2 clearly teaches, repeatedly, that only one algorithm is chosen for responding to "the given traffic and interference conditions." Specific examples are:

. . . the switch also executes the following activities ...: 1. Selection of the algorithm according to the new traffic and interference conditions; and 2. Transition from one to another algorithm. (Section 7.2, lines 13-16; emphasis added.)

The switch compares all available ...algorithms to determine which one provides the best performance ..." (lines 25-26; emphasis added.)

The multi-algorithm channel allocation mechanism...selects the most superior available ...algorithm [singular] with respect to the actual traffic and interference conditions. (lines 42-46; emphasis added.)

The Applicants therefore respectfully submit that claim 1 is patentable over the combination of Mortensen and Vucetic for the reasons stated above.

Claim 9, as amended, contains features similar to those of claim 1, namely "gathering a plurality of events, wherein at least one RRM algorithm is associated with the event" and "storing the events together". Therefore, claim 9 is patentable over the combination of Mortensen and Vucetic for at least the same reasons presented above concerning claim 1.

Claims 3, 4, 10, and 11 stand rejected under 35 USC §103 (a) as unpatentable over Mortensen and Vucetic and further in view of applicant admitted prior art in the present application. Claims 3 and 4 are dependent on claim 1 and are therefore patentable over the cited art for the same reasons given above concerning claim 1. Claims 10 and 11 are dependent on claim 9 and are therefore patentable over the cited art for the same reasons given above concerning claim 9.

Claim 8 stands rejected under 35 USC §103(a) as unpatentable over Mortensen and Vucetic and further in view of U.S. Patent No. 6,771,624 to Lu (hereinafter "Lu"). Claim 8 is dependent on claim 1 and therefore contains all the features of claim 1. Lu does not remedy the deficiencies of Mortensen and Vucetic with respect to claim 1, presented above, as Lu is concerned only with algorithm priorities. Therefore claim 8 is patentable under 35 USC §103 (a) over the cited art.

Claims 2 and 7 are dependent on claim 1 and claim 14 is dependent on claim 9. Therefore claims 2, 7, and 14 are patentable over the cited art for at least the reasons stated above concerning claims 1 and 9, respectively.

Based on the arguments presented above, withdrawal of the 35 USC §103 (a) rejection of claims 1-4, 7-11, and 14, is respectfully requested.

Claim Objections

The Examiner objected to claims 5, 6, 12 and 13 as being dependent upon a rejected base claim, but would allow them if rewritten in dependent form including all of the limitations of the base claim and any intervening claims. The Examiner is thanked for indicating that claims 5, 6, 12 and 13 contain allowable subject matter.

Claims 5 and 6 are dependent on claim 1. Claims 12 and 13 are dependent on claim 9. As presented above, the Applicants submit that claims 1 and 9 are allowable over the art of record. Therefore, claims 5, 6, 12 and 13 are also allowable over the art of record. The withdrawal of the objection to the claims 5, 6, 12 and 13 is therefore respectfully requested.

Conclusion

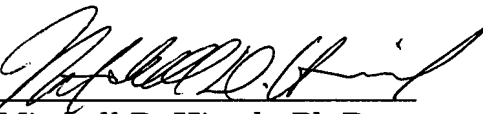
If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

Applicant: Briancon et al.
Application No.: 10/761,858

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1-16, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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